



UNITED STATES PATENT AND TRADEMARK OFFICE

*lu*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/990,353      | 11/23/2001  | Huang-Tsun Chen      | MR3029-5            | 1974             |

4586 7590 10/02/2003

ROSENBERG, KLEIN & LEE  
3458 ELLICOTT CENTER DRIVE-SUITE 101  
ELLICOTT CITY, MD 21043

|          |
|----------|
| EXAMINER |
|----------|

DHARIA, PRABODH M

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2673

DATE MAILED: 10/02/2003

*2*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/090,353

Applicant(s)

CHEN, HUANG-TSUN

Examiner

Prabodh M Dharia

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

*Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words and the language should be clear and concise and should not repeat information given in the title, the title on the top of the page should be removed. Correction is required. See MPEP § 608.01(b).

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,2, 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuga (5,828,367) in view of Hyatt (5,432,526).

Regarding Claim 1, Kuga teaches an auto-adjusting light system (Col. 2, Lines 10-14, Lines 17-20, Lines 29-39) of a motionless-image display (Col. 2, Lines 32,33); starting means

Art Unit: 2673

for receiving said plurality of controlling signals to generate a plurality of starting voltages (Col. 1, Line 62 to Col. 2, Line 9); and displaying means for receiving said plurality of starting voltages to output and adjust the contrast and the brightness of said motionless-image display (Col. 2, Lines 10-39).

However, Kuga fails to teach a display system comprising: inputting means for transmitting a setting value; photosensitive means for generating and transmitting a plurality of variation values by the variation of the light source in the background; controlling means for receiving said setting value and said plurality of variation values to generate a plurality of controlling signals, wherein said controlling means can feed back said plurality of variation values in order.

However, Hyatt teaches a display system (Col. 7, Lines 18-20) comprising: inputting means for transmitting a setting value (Col. 7, Lines 50-52); photosensitive means for generating and transmitting a plurality of variation values by the variation of the light source in the background (Col. 7, Lines 52-57); controlling means for receiving said setting value and said plurality of variation values to generate a plurality of controlling signals (Col. 7, Lines 59-67), wherein said controlling means can feed back said plurality of variation values in order (Col. 7, Line 59 to Col. 8, Line 3).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Hyatt in Kuga teaching for having a illumination control system to illuminate display in various environment.

Art Unit: 2673

Regarding Claim 2, Kuga teaches said setting value comprises an internal value that has been predetermined in said auto-adjusting light system (Col. 1, Lines 28-42, Col.2, Lines 29-32, Lines 14-19).

Regarding Claim 4, Kuga teaches said controlling means can compare the difference of said setting value and said plurality of variation values to generate said a plurality of controlling signals (Col. 3, Lines 53-67).

Regarding Claim 5, Hyatt teaches said controlling means can compare the difference of said plurality of variation values from each other to generate said plurality of controlling signals (Col. 7, Lines 55 to Col. 8, line 3).

Regarding Claim 6, Hyatt teaches the feed-back action of said controlling means (Col. 108, Lines 56-66)

Kuga teaches the inactive when said plurality of variation values are the same from each other (Col. 4, Lines 3-12, Lines 20-28).

Regarding Claim 7, Kuga teaches said starting means generates said plurality of starting voltages as the same as each other (Col. 4, Lines 3-12, Lines 20-28).

Hyatt teaches when the feed-back action of said controlling means is inactive (Col. 108, Lines 56-66).

Art Unit: 2673

Regarding Claim 8, Kuga teaches said displaying means keeps constant contrast and brightness of said motionless-image display (Col. 2, Lines 17-21, Col. 3, Line 53 to Col. 4, Line 12).

Regarding Claim 9, Kuga teaches an auto-adjusting light system (Col. 2, Lines 10-14, Lines 17-20, Lines 29-39) of a motionless-image display (Col. 2, Lines 32,33); generating a setting value (Col. 1, Lines 28-42, Col.2, Lines 29-32, Lines 14-19); generating a first starting voltage according to said first controlling signal; receiving said first starting voltage to output a light with a first contrast and a first brightness (Col. 1, Line 62 to Col. 2, Line 39); generating a second starting voltage according to said second controlling signal; and receiving said second starting voltage to adjust said light with said first contrast and said first brightness to form said light with a second contrast and a second brightness (Col. 1, Line 62 to Col. 2, Line 39).

However, Kuga fails to teach a display system comprising: generating a first variation value according to a first light source in the background by transduction of optical radiation; receiving said setting value and said first variation value to generate a first controlling signal; second variation value according to a second light source in the background by transduction of optical radiation; feeding back said first variation value and receiving said second variation value to generate a second controlling signal.

However, Hyatt teaches a display system (Col. 7, Lines 18-20) comprising: generating a first variation value according to a first light source in the background by transduction of optical radiation; receiving said setting value and said first variation value to generate a first controlling signal (Col. 7, Lines 50-57); second variation value according to a second light source in the

Art Unit: 2673

background by transduction of optical radiation; feeding back said first variation value and receiving said second variation value to generate a second controlling signal (Col. 7, Line 50 to Col. 8, Line 3, Col. 108, Lines 20-55).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Hyatt in Kuga teaching for having a illumination control system to illuminate display in various environment.

Regarding Claim 10, Kuga teaches said first controlling signal is generated by the difference between said first variation value and said setting value (Col. 2, Lines 10-21, Col. 3, Line 53 to Col. 4, Line 12).

Regarding Claim 11, Kuga teaches said second controlling signal is generated by the difference between said first variation value and said second variation value (Col. 2, Lines 10-21, Col. 3, Line 53 to Col. 4, Line 12).

5. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuga (5,828,367) in view of Hyatt (5,432,526) as applied to claims 1,2,4-11 above, and further in view of Tosaki (5,844,530).

Regarding Claim 3, Kuga teaches an auto-adjusting light system (Col. 2, Lines 10-14, Lines 17-20, Lines 29-39) of a motionless-image display (Col. 2, Lines 32,33); starting means for receiving said plurality of controlling signals to generate a plurality of starting voltages (Col.

Art Unit: 2673

1, Line 62 to Col. 2, Line 9); and displaying means for receiving said plurality of starting voltages to output and adjust the contrast and the brightness of said motionless-image display (Col. 2, Lines 10-39).

However, Kuga modified by Hyatt fails to teach said setting value can be set via an inputting button by manual.

However, Tosaki teaches said setting value can be set via an inputting button by manual (Col. 7, Lines 59 to Col. 8, Line 4, Col. 3, Line 66 to Col. 4, Line 35).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Tosaki in Kuga modified by Hyatt teaching for having a head mounted display; transmission type for displaying prescribed images while transmitting outside light, a head mounted device for supporting the display device in front of the face, and a visor for reducing the quantity of outside light incident on the display device.

Regarding Claim 12, Dunton et al. teaches an auto-adjusting light apparatus of a digital photo-album (Col. 1, Lines 11-14, Col. 2, lines 48-67); comprising an inputting sub-circuit that is coupled to receive a setting value (Col. 1, Lines 28-42, Col.2, Lines 29-32, Lines 14-19).

However, a photosensitive sub-circuit that is coupled with the output terminal of said inputting sub-circuit to form a node, wherein said photosensitive sub-circuit can generate a plurality of variation values according to the various light source in the background; a controlling sub-circuit whose the input terminal is coupled with said node to receive said plurality of variation values and said setting value, wherein the output terminal of said controlling sub-circuit is coupled with said output node to feed back said plurality of variation values in order, and said



Art Unit: 2673

controlling sub-circuit can perform a compared action to generate a plurality of controlling signals according to the difference between said plurality of variation values and said setting value and the difference between said plurality of variation values from each other; an inverter whose the input terminal is coupled with the controlling sub-circuit to receive the plurality of controlling signals, wherein the inverter can generate a plurality of starting voltages according to the plurality of controlling signals; and a liquid crystal, displaying sub-circuit whose the input terminal is coupled with the output terminal of said inverter; to receive said plurality of starting voltages, so as to lighten the light with various contrasts and brightness.

However, Hyatt teaches a photosensitive sub-circuit that is coupled with the output terminal of said inputting sub-circuit to form a node, wherein said photosensitive sub-circuit (Col. 108, Lines 37-40) can generate a plurality of variation values according to the various light source in the background (Col. 108, Lines 38-40, Line 42); a controlling sub-circuit whose the input terminal is coupled with said node to receive said plurality of variation values and said setting value (Col. 7, Lines 50-57), wherein the output terminal of said controlling sub-circuit is coupled with said output node to feed back said plurality of variation values in order, and said controlling sub-circuit can perform a compared action to generate a plurality of controlling signals according to the difference between said plurality of variation values and said setting value and the difference between said plurality of variation values from each other (Col. 7, Line 50 to Col. 8, Line 3, Col. 108, Lines 20-55); an inverter whose the input terminal is coupled with the controlling sub-circuit to receive the plurality of controlling signals (Col. 16, Lines 21-32), wherein the inverter can generate a plurality of starting voltages according to the plurality of controlling signals (Col. 16, Lines 14-35); and a liquid crystal, displaying (Col. 7, Line 18-20)

• Art Unit: 2673

sub-circuit whose the input terminal is coupled with the output terminal of said inverter(Col. 16, Lines 14-35); to receive said plurality of starting voltages, so as to lighten the light with various contrasts and brightness (Col. 108, Line 20 to Col. 109 Line 18).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Hyatt in Dunton et al. teaching for having a illumination control system to illuminate display in various environment.

Regarding Claim 13, Dunton et al. teaches said setting value is an internal value of said digital photo-album (Col. 1, Lines 11-14, Col. 2, lines 48-67).

Regarding Claim 15, Hyatt teaches said photosensitive sub-circuit comprises a photo-sensor (Col. 108, Lines 39-55).

Regarding Claim 16, Hyatt teaches said photo-sensor (Col. 108, Lines 39-55). However, Hyatt fails to teach specifically photo-sensor comprises a photosensitive resistor. However, it is well known to one in the ordinary skill in the art that photo-sensor comprises a photosensitive resistor (Col. 6, Lines 3,4, Yamauchi et al. (4,527,093)).

Regarding Claim 17, Hyatt teaches said controlling sub-circuit comprises a comparator (Col. 108, Line 20 to Col. 109 Line 18).

• Art Unit: 2673

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunton et al. (6,556,242 B1) in view of Hyatt (5,432,526) as applied to claims 12,13,15-17 above, and further in view of Tosaki (5,844,530).

Regarding Claim 14, Dunton et al. teaches an auto-adjusting light apparatus of a digital photo-album (Col. 1, Lines 11-14, Col. 2, lines 48-67); comprising an inputting sub-circuit that is coupled to receive a setting value (Col. 1, Lines 28-42, Col.2, Lines 29-32, Lines 14-19).

However, Dunton et al. modified by Hyatt fails to teach said setting value can be set via an inputting button by manual.

However, Tosaki teaches said setting value can be set via an inputting button by manual (Col. 7, Lines 59 to Col. 8, Line 4, Col. 3, Line 66 to Col. 4, Line 35).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Tosaki in Dunton et al. modified by Hyatt teaching for having a head mounted display; transmission type for displaying prescribed images while transmitting outside light, a head mounted device for supporting the display device in front of the face, and a visor for reducing the quantity of outside light incident on the display device.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references anticipate the claimed material and render the claims obvious.

• Art Unit: 2673

*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gates et al. (6,531,997 B1) Method for addressing electrophoretic display.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 703-605-1231.

The examiner can normally be reached on M-F 8AM to 5PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-3054938. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Any response to this action should be mailed to:

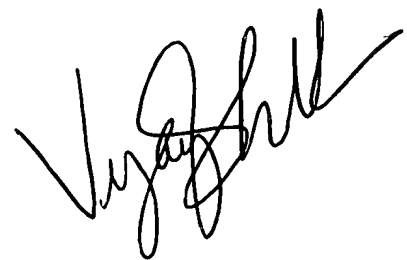
Commissioner of Patents and Trademarks

Washington, D.C. 2023

PD

AU2673

September 15, 2003



VIJAY SHANKAR  
PRIMARY EXAMINER